Specification For Approval

承 認 書

客　　戶 （Customer）			
品　　名 （Product Name）	ECM		
機　　種 （Model No.）			
客戶料號 （Customer Parts No.）			
供應商料號（Supplier Model No.）	PVM6012B-1PC423G028		
客戶承認簽章 Customer Approval Signature	In Charge	Checked	Approval

Revision History

Version	Date	Description	Author
V 00	2022.08.02	Creation	VIVIAN

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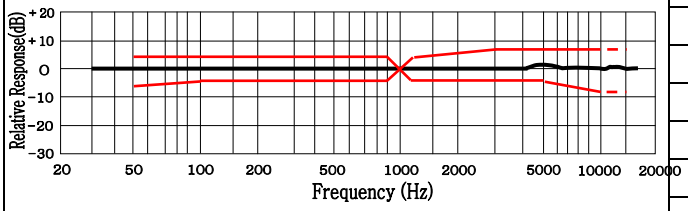
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1.	**Name：**	Omnidirectional Back Electret Condenser Microphone			
2.	**Model No.**	**PVM6012B-1PC423G028**	**C1= 10 PF**	**C2= 33PF**	**PIN=2.8mm**
3.	**Scope：**	This specification applies back electret condenser microphone（Temp=20±2℃Room Humidity=65±5%）			

No	Parameter	Symbol	Condition	Limits			Unit
				Min.	Center	Max.	
3.1	Sensitivity	S	0dB=1V/Pa，at 1kHz	-45	-42	-39	dB
3.2	Output impedance	Z out	f=1kHz			2.2	KΩ
3.3	Current Consumption	I_{DSS}	V_{CC} =2.0V,R_L=2.2KΩ			500	μA
3.4	Signal to Noise Ratio	S/N	at 1kHz S.P.L=1Pa (A-Weighted Curve)	58			dB
3.5	Decreasing Voltage	ΔS-VS	V_{CC}=3.0V to2.0V			-3	dB
3.6	Operating Voltage			1.0		10	V
3.7	Maximum input S.P.L					110	dB
3.8	Typical Frequency Response Curve						

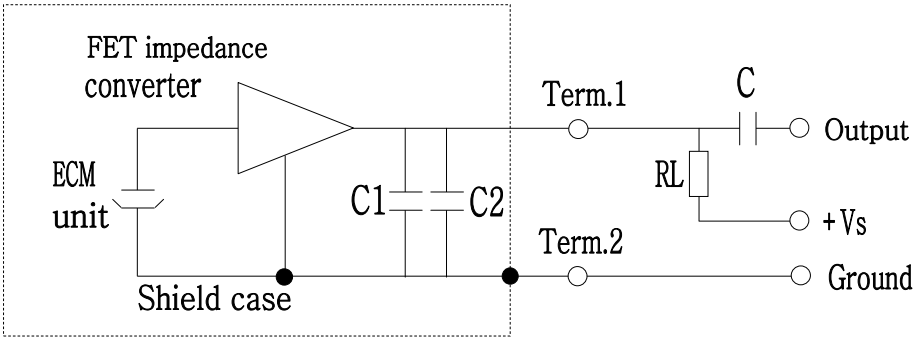
Frequency Response



Microphone Response Tolerance Window

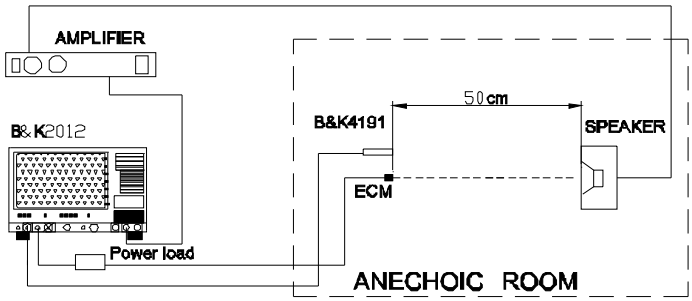
Frequency(Hz)	Lower Limit(dB)	Upper Limit(dB)
50	-6	+3
100	-3	+3
800	-3	+3
1000	0	0
1200	-3	+3
3000	-3	+8
5000	-3	+8
10000	-8	+8

3.9	Measurement Circuit



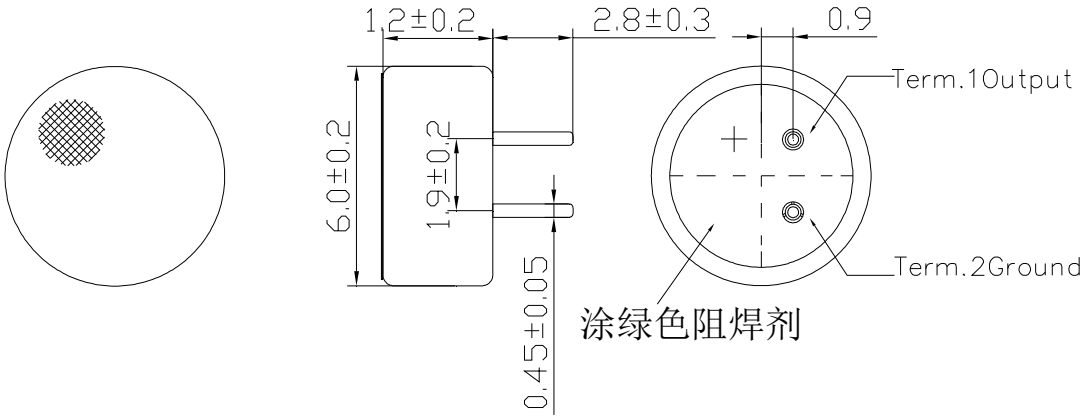
Explain
R_L=2.2KΩ
Vs =2.0V
C1=10PF
C2=33F
C=1μF

4. Test Setup Drawing

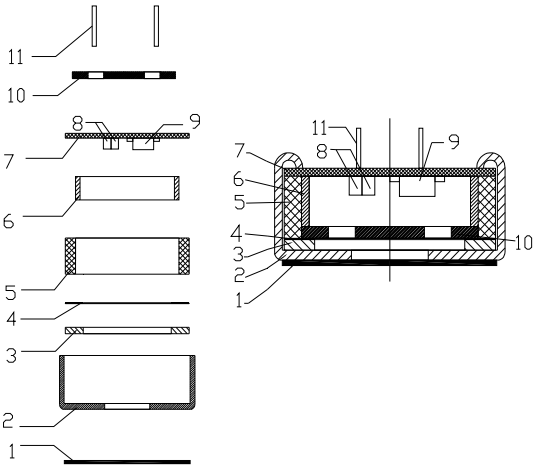


5. Appearance And Dimension

Unit：mm



6. Drawing



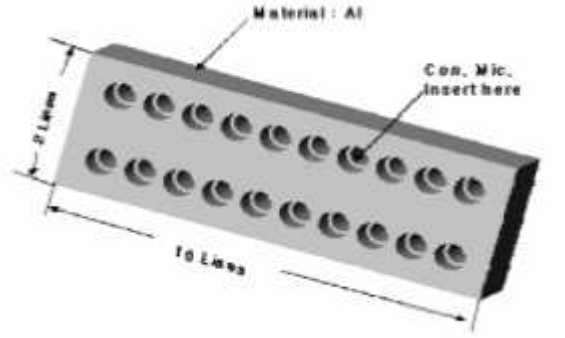
No.	Name	material	QTY	Remark
11	PIN	Copper	2	
10	ELECTRET BACK		1	
9	FET		1	
8	CHIP CAPACITOR		2	10 PF
7	P.C.B		1	FR -4
6	Copper ring		1	
5	HOUSPING CHAMBER		1	
4	SPACER		1	
3	POLARIZED DIAPHRAGM		1	
2	CASE	Copper	1	
1	FELT	Fabric cloth	1	

7. Temperature Conditions

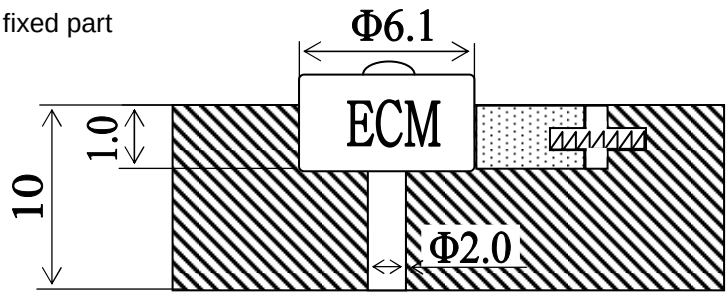
Storage Temperature Range	Operation Temperature Range
-40℃ ~ +85℃	-40℃ ~ +85℃

8.	**Terminal Mechanical Strength** Terminal mechanical strength to be no interference in operation after pulled the terminal with 1kg strength for 1 minute.
9.	**Reliability Test** After any following tests, the sensitivity of the microphone to be within ±3dB of initial sensitivity after 3 hours of conditioning at 20℃. 1. Vibration Frequency1 : 10Hz~55Hz Amplitude : 1.52mm Change of Frequency : 1 octave/min 2 hours in each of 3 axes 2. High Temperature Test +85℃ for 240 hours. 3. Low Temperature Test -40℃ for 240 hours. 4. Humidity Test 90%～95%RH,+60℃ for 240 hours. 5. Thermal shocking test –40°C, 30 minutes ↔ +80°C, 30 minutes, repeated 32 cycles → room temperature, 3 hours. 6.Temperature Cycles -40℃ ←→ +20℃ ←→ +85℃ ←→ +20℃ ←→ -40℃ (2h) (0.5h) (2h) (0.1h) (2h) (0.5h) (2h) (0.5h) (2h) for 5 cycles.9-6 Packing Drop Test Height：1m Procedure: 5 times from each of axes **Electrostatic discharge** Tested to IEC61000-4-2 level 3： a) Contact discharge The microphone shall operate normally after 10 discharges to is 6KV DC and the discharge network is 150pF and 330Ω. b) Air discharge The microphone shall operate normally after 10 discharges to is 8KV DC and the discharge network is 150pF and 330Ω
10.	**Soldering Condition** **1.** We suggest using anti-static welding machine which can control soldering temperature automatically. **2.** Soldering temperature should be controlled under 320℃ and soldering time for each terminal should be 1~2 sec.. **3.** Microphone should be fixed on the metal block (heat sink), which has high radiation effects, and heat sink shall contact with MIC tightly. **4.** Microphone may easily be destroyed by the static electricity and the countermeasure for eliminating the static electricity shall be executed (worktable and human body shall be ground connection).

10. Heat Sink Shape of heat sink



Shape of hole at fixed part



11. **Packing Introduction** **Packing chart**

DIMENSION:(LENGTH*WIDTH *HEIGHT)

SMALL PACKET

100mm*100mm*5mm

a) MID PACKET:

205mm*105mm*50mm

b) PAPER CASE:

550mm*230mm*235mm

EQUIPMENT

c) ADHENSIVE TAPE MACHINE

d) AUTO PACKER

PACKING INTRODUCTION

e) 100PCS/ INHALE PLASTIC BOX

f) 1400PCS/MID PACKET

g) 28000PCS/PAPER CASE

QUANTITY INTRODUCTION

h) 1PC=0.20g

i) NET WEIGHT：5.6kg

GROSS WEIGHT：8.6kg

LABEL STIPULATION

LABELEDEVERY BOXES

(SEE THE CHART)

DIMENSIONS SHOULD BE SEEN EASILY

